

School of Medicine



J Japan Science and Technology Agency











Japan-U.S. Research Collaboration Week - Creating Japan-US Research Highway -

Date and time (PST):

July 20 (Thu) 8:30-11:00, 15:30-18:00 July 21 (Fri) 8:30-11:00, 15:30-18:00

July 22 (Sat) 9:30-12:15, 13:30-18:00

July 24 (Mon) 8:30-11:00, 13:10-18:10

July 25 (Tue) 10:00-12:00, 13:00-15:30

Place:

Stanford University, Beckman Center, Munzer Auditorium (279 Campus Drive W, Stanford, CA 94305)

Stanford University, Li Ka Shing Center For Learning (LKSC) Room 120 (291 Campus Drive, Stanford, CA) *Only for 7/22 (Sat)

Co-Hosts:

Stanford University School of Medicine, Japan Science and Technology Agency (JST), Kanagawa Prefecture, Japan Agency for Medical Research and Development (AMED), Japan Society for the Promotion of Science (JSPS), Nagoya University, United Japanese Researchers Around the World (UJA)

*We encourage you to register by June 30 (Fri)

[Agenda]

(20_1) "ME-BYO" our endless frontier [Plenary session]

Japan's population is aging ahead of the rest of the world, and increasing social security costs and a shrinking workforce are major issues. Kanagawa Prefecture defined "ME-BYO" as the state of the body and mind between health and illness, and collaborating with Stanford University for the past decade, they put an effort continuously to create new industries for the intervention in this state to realize a healthier and higher quality of life. Japan Science and Technology Agency established the Moonshot R&D Program to promote challenging R&D based on revolutionary concepts to tackle the issues in an aging society, a realization of ultra-early disease prediction and intervention, establishing a method to foresee the breakdown of inter-organ networks and help at-risk individuals convert back from a presymptomatic state to a healthy one. We seek international collaboration to expand the ME-BYO concept and create disruptive innovation at the intersection of science and society. We will discuss how we can innovate our society at the intersection of science and industry as well as synergies throughout Japan-US collaboration.

Date & Time: July 20 (Thu) 8:30-11:00

Venue: Beckman Center, Munzer Auditorium

Session organizers: Stanford University School of Medicine & Kanagawa prefecture **Presenters (provisional)**:

- · Lloyd B. Minor, Dean, Stanford School of Medicine
- Ronald Pearl, Professor, Anesthesiology, Perioperative and Pain Medicine, Stanford School of Medicine
- Ryuta Nomura, CEO, Central Institute for Experimental Animals (CIEA)
- Michiyo Yamaguchi, Vice President, Kyoto Prefectural University

(20_2) Tracking our health trajectories

To ensure healthy and high quality of life in the aging society, we would like to strive for ultra-early disease prediction and intervention that supersedes today's conventional treatment approach only after the detection of symptoms. Multi-layered approaches, including cutting-edge research and development of technologies as well as creating the ME-BYO industry, are needed. Taking the opportunities accumulating stakeholders at Stanford, cutting-edge activities on developing novel research will be presented, and opportunities to make international, inter-sectoral, and inter-organizational collaborations are discussed.

Date & Time: July 20 (Thu) 15:30-18:00

Venue: Beckman Center, Munzer Auditorium

Session organizers: Stanford University School of Medicine & Kanagawa prefecture **Presenters (provisional)**:

- Gen Sobue, Chairperson, Aichi Medical University / Program Director, Moonshot R&D Program Goal 2 (Video message)
- Yoshiharu Matsuura, Director, Center for Infectious Diseases Education and Research (CiDER) / Specially Appointed Professor, Research Institute for Microbial Diseases, Osaka University
- Shusaku Hayashi, Assistant Professor, Institute of Natural Medicine, Toyama University
- Ung-il Chung, Executive Board Member, Vice President and Dean, School of Health Innovation, Kanagawa University of Human Services
- Euan Ashley, Associate Dean, Stanford School of Medicine
- Utkan Demirci, Professor of Radiology, Interim Division Chief and Director of the Canary Center, Stanford School of Medicine

(21_1) Transdisciplinary challenges for mental resilience

We should mind the social issues related to our mental states have expanded and become increasingly severe. How can we cope with this situation? The key is developing a comprehensive understanding of mental states and kind interpersonal and intergroup communication that will lead us in a mutually beneficial direction. We seek transdisciplinary collaboration to understand and intervene in our society's mental states, including developing technology that provides peace of mind and vitality. To promote research collaboration, cutting-edge activities on the development of novel research will be presented, and expectations for the focus of future Japan-US collaborations will be discussed.

Date & Time: July 21 (Fri) 8:30-11:00

Venue: Beckman Center, Munzer Auditorium

Session organizers: Stanford University School of Medicine & Kanagawa prefecture **Presenters (provisional)**:

- Seiji Kumagai, Associate Professor, Institute for the Future of Human Society,
 Kyoto University / Program Director, Moonshot R&D Program Goal 9
- Yasue Mitsukura, Professor, Faculty of Science and Technology, Keio University
- Shinichi Tokuno, Professor, Graduate School of Health Innovation Kanagawa University of Human Services
- Victor G. Carrión, Vice Chair, Department of Psychiatry and Behavioral Sciences, Stanford School of Medicine

(21_2) How have we worked against COVID-19?

The COVID-19 pandemic claimed many victims and dealt an economic blow to the entire world. This disaster highlighted the vulnerability of society to infectious diseases. The crisis has been a chance for innovation. How did we scientists confront this situation, and how did we contribute to the transformation of society and science? We will look back at the collaborative efforts of academia worldwide to combat this pandemic and reflect on what we could create from this crisis. We will also discuss ongoing initiatives and opportunities calling for international collaboration.

Date & Time: July 21 (Fri) 15:30-18:00

Venue: Beckman Center, Munzer Auditorium

Session organizers: Stanford University School of Medicine & Kanagawa prefecture **Presenters (provisional)**:

- Ronald Pearl, Professor, Anesthesiology, Perioperative and Pain Medicine, Stanford School of Medicine
- Steven L. Shafer, Emeritus Faculty-Med Ctr Line, Miscellaneous, Stanford School of Medicine
- Hiroyuki Katayama, Professor, Graduate School of Engineering, The University of Tokyo
- Ramasamy Paulmurugan, Professor, Radiology Rad/Molecular Imaging Program.
 Stanford School of Medicine
- Tarik Massoud, Professor, Department of Radiology, Stanford School of Medicine

(22) Building networks of diverse and highly talented researchers

In promoting sustainable international research collaborations, it is important to advance institutionalized efforts with a deep understanding of the reality of researchers going abroad and the circumstances of host institutions. To this end, JSPS has been strengthening the impact of its fellowship programs and other mechanisms. And this year, AMED and JST will launch a new program called ASPIRE (Adopting Sustainable Partnerships for Innovative Research Ecosystem), which supports international research collaborations, including international talent mobility and circulation, to establish long-term collaborative networks. In this one-day event, we aim to bring together students, researchers, and administrators from Japan and the US to foster research collaboration. Our objective is to accumulate valuable lessons from ongoing activities and engage in discussions to gain insights into effective mechanisms that facilitate cross-border collaborations among researchers, universities, and funding agencies, ultimately accelerating the pace of collaboration.

Date & Time: July 22 (Sat) 9:30-12:15, 13:30-18:00

Venue: Li Ka Shing Center For Learning (LKSC) Room 120

Session organizers: Japan Agency for Medical Research and Development & Japan Science and Technology Agency & Japan Society for the Promotion of Science & United Japanese Researchers Around the World

Moderator:

Takuto Miyamoto, Washington DC Office Director, Japan Agency for Medical Research and Development

Presenters (provisional):

- Yuichi Ono, Professor and Deputy Director, International Research Institute of Disaster Science (IRIDeS), Tohoku University
- Masaki Sato, Manager, Department of International Affairs, Japan Science and Technology Agency
- Kyotaro Maeda, Director, North-America Center, National Institute of Information and Communications Technology
- Yusaku Nakabeppu, Director, San Francisco Office, Japan Society for the Promotion of Science
- Justin L. Gardner, Associate Professor, Department of Psychology, Stanford University
- Hirohisa A. Tanaka, Professor, Fundamental Physics Directorate / SLAC National Accelerator Laboratory
- Patricia Falcone, Deputy Director for Science and Technology, Lawrence Livermore National Laboratory
- Tomoko Hayashi, Project Scientist, Moores Cancer Center, University of California San Diego
- Shin'ichiro Matsuo, Research Professor of Computer Science, Georgetown University
- Richard Dasher, Adjunct Professor, East Asian Languages and Cultures, Stanford University

- Junji Urakawa, Director, Washington DC Office, Japan Society for the Promotion of Science
- Kazuhito Morioka, Director, United Japanese Researchers Around the World

(24_1) Next-generation technologies for micro-sampling

An international collaboration between Stanford University and Nagoya University was launched in 2021 under the key concept of "Health is a product of the Genome & Exposome" to conduct a "Japan-U.S. Joint Cohort Study to Elucidate the Factors of Individual Differences in Responses to Health and Disease." This session will provide an overview of this international collaborative research and introduce future health profiling approaches across diverse populations created by next-generation technologies, such as dynamic health profiling through integrated analysis of wearables and multi-omics data.

Date & Time: July 24 (Mon) 8:30-11:00

Venue: Beckman Center, Munzer Auditorium

Session organizers: Session organizer: Stanford University School of Medicine & Nagoya University Graduate School of Medicine

Presenters (provisional):

- Makoto Ishii, Professor, Graduate School of Medicine, Nagoya University
- Michael Snyder, Professor & Chair, Department of Genetics, Stanford School of Medicine
- · Lisa Goldman Rosas, Assistant Professor, Stanford School of Medicine
- Masahiro Jinzaki, Professor, School of Medicine, Keio University
- Rui Yamaguchi, Chief, Aichi Cancer Center Research Institute

(24_2) Future of Electronics with New Semiconductors

Professor Chowdhury's group at Stanford University and the Center for Integrated Research of Future Electronics at Nagoya University are working closely together to establish future electronics with new semiconductors that will revolutionize our lives. Within this framework, companies related to future electronics from Japan and the US will present their vision.

Date & Time: July 24 (Mon) 13:10-18:10

Venue: Beckman Center, Munzer Auditorium

Session organizers: Stanford University School of Engineering & Nagoya University Institute of Materials and Systems for Sustainability

Presenters (provisional):

- Kenji Iso, Manager, Mitsubishi Chemical / Designated Professor, Nagoya University
- Tetsu Kachi, Fellow, Toyota Central R&D Labs., Inc / Designated Professor, Nagoya University
- Tim McDonald, Senior Director, GaN Marketing & Application, Infineon Technologies
- Dilip Risbud, Director, WBG Device Design and Development, Renesas Electronics

America Inc.

- Roger Nichols, 6G Program Manager, Keysight Technologies
- Lorenza Moro, Director, Technology Management, Samsung Display USA R&D
- Srabanti Chowdhury, Professor, Stanford University School of Engineering
- Hiroshi Amano, Distinguished Professor and Director of Center for Integrated Research of Future Electronics / Nobel Laureate in Physics 2014

(25) Fostering global business growth through industry-academia collaboration

To develop multilayered collaboration between business and academia in Japan and the US, comparing the current state of industry-university collaboration in Japan and the US is meaningful. Since the academic environment differs between Japan and the US, bringing the American model to Japan and vice versa may not always work. By extending invitations to accomplished deep-tech startup companies, successful university commercialization programs, thriving investors, and exemplary education programs, we intend to underscore the importance of universities and startups. Additionally, we aim to engage in discussions with startups and investors regarding the emerging model of global industry-academia collaboration that is anticipated in the future. The organizers of this session envision it as the inaugural stride towards establishing an "Academia's Davos meeting" in the times to come.

Date & Time: July 25 (Tue) 10:00-12:00, 13:00-15:30 Venue: Beckman Center, <u>Munzer Auditorium</u> Session organizers: Stanford University & SOZO Ventures Presenters (provisional):

- Jennifer Anne Doudna, Professor, Department of Chemistry and the Department of Molecular and Cell Biology at the University of California, Berkeley / Nobel Laureate in Chemistry 2020
- · John L. Hennessy, Stanford University's 10th president
- · Cameron Teitelman, Founder & Chairman, Start X
- · Koichiro Nakamura, Founder and General Partner, Sozo Ventures

*Some other presenters from <u>Kauffman Fellows Program</u>, <u>PEAR VC</u>, <u>FirstRound</u>, <u>Arch</u> Venture will be expected.